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Naturalist Notebook

AUGUST/SEPTEMBER 1973 VOLUME 9 NUMBER 8

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Herring Gull Nest ..... Photograph by Frank R. Haeni

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Editor: Deborah E. Reichert

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AN OL' SALT TALKS ABOUT FISHING

by Warren L. Perry

We are sure of one thing: whether a city slicker or an ol' salt, that even a fish wouldn't get into trouble if he kept his mouth shut! Fish taken by hook and line or pole are caught for fun or "sport" —when they are caught for market they are classified as "commercial".

Fish are also classified as food fish and industrial fish. Meal made from industrial fish is used in poultry feeds and certain "solubles", which are fed to young pigs and livestock. About 200 species of fish and shellfish are used for human food in the U.S.

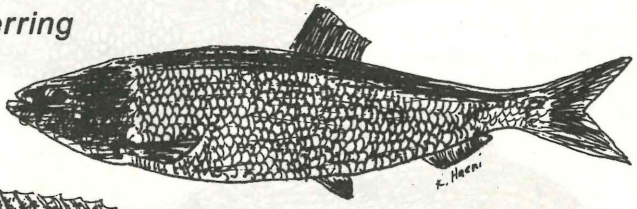
The fishing industry of the five Northeast states, Maine, Massachusetts, Rhode Island, Connecticut, and New Hampshire derives its income from five sources:

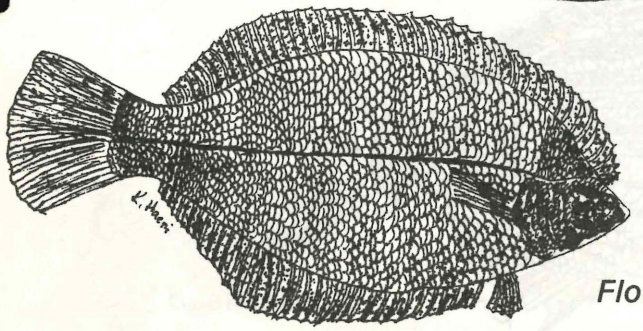
1. GROUND FISH. These fish live on the bottom or in cool waters off the Continental Shelf. They are taken by trawl or dragging. Types of ground fish are haddock, ocean perch, pollock, hake, scup, and flats (flounder, halibut, and sole).

2. PELAGIC FISH. These fish are found in the upper layers of the ocean, where the water temperature isn't as cold. They are caught in weirs (traps), gill nets, and a method of fishing known as purse seine. Species of fish in this category are sea herring, tuna, mackerel, butters, and menhadden.

3. ANADROMOUS FISH. This species spends part of its life in the open ocean and in the spring moves inshore to spawn in fresh water. They are caught in weirs, haul seines, and gill nets. These fish include alewives, salmon, and shad. Herring species are smoked or pickled and are used for lobster bait and by long liners when setting trawl.

Common Herring





Flounder

4. SHELLFISH. In this group are the scallops (bay and sea), oysters, sea clams, soft shell clam, and quahogs. Also in this group are the crustaceans: lobster, shrimp, and crabs. Shellfish are taken by bar rakes (dragging) or by hand digging, collecting off beds or grants, and by drudging.

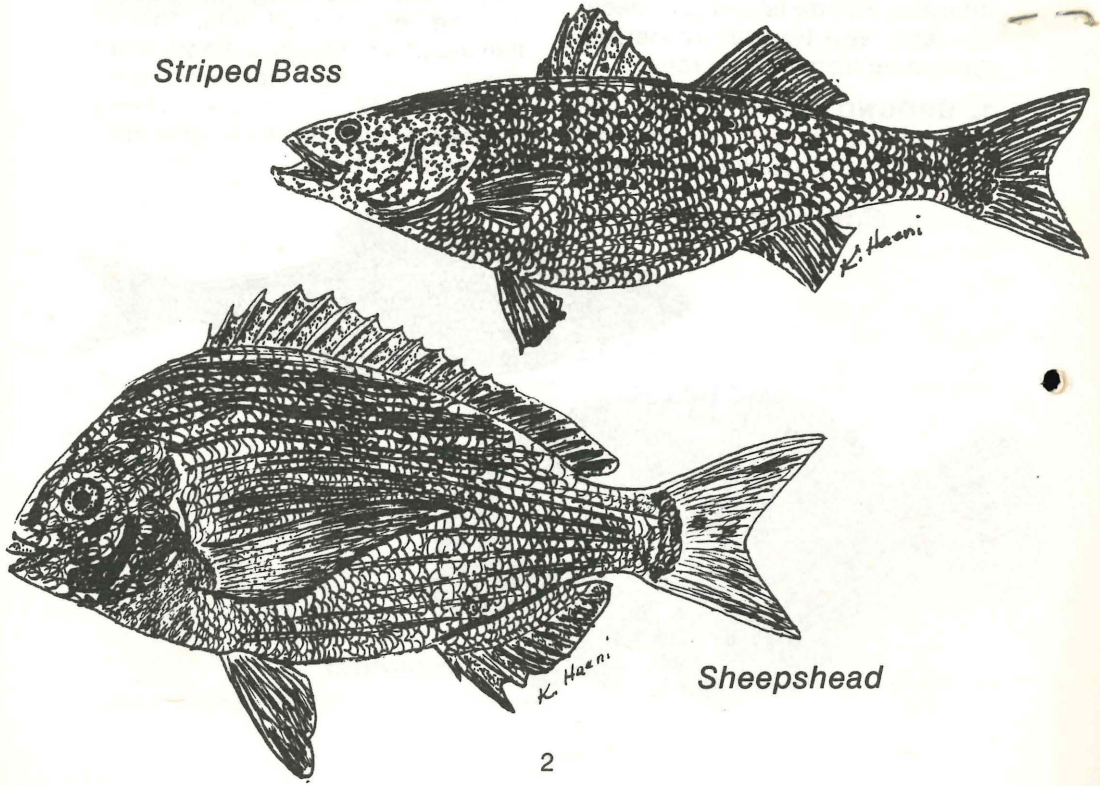
5. INDUSTRIAL FISH. These are also known as "trash", fish that are to be processed into oil, meal, and animal food. Capture methods for this group are divided into the purse seine fishing for the oil-rich menhaden and the otter trawl or dragger for bottom fish, from which liquid concentrates and meals are derived.

There are six market forms of fish: (1) whole or round, (2) steaks, (3) fillets, (4) sticks, (5) dressed, and (6) drawn. These are the six basic ways of cleaning and dressing fish, but there are 1001 ways of preparing it!

Men have been fishing for thousands of years, but know comparatively little about fish and what affects their abundance and movements. It's also fishy that only 1% of the world's food supply is obtained from the sea, which occupies 70% of the earth's surface. The annual U.S. harvest is 5 billion pounds, and we rank about 5th in the fishing game.

There are more than 77,000 boats used in commercial fishing. There are 130,000 men on the boats and another 400,000 engaged in the fisheries and related vocations.

Mr. Perry is a Supervisory Park Technician at the Cape Cod National Seashore. A life-long fisherman, Mr. Perry gives demonstrations on fishing and preparing fish. He also enjoys fishing in his spare time.



EXPLORING THE CAPE COD NATIONAL SEASHORE

by Deborah Reichert

While on Cape Cod, Henry David Thoreau once remarked, "You can stand here and put all of America behind you." Although the Cape has changed drastically since Thoreau walked its beaches, there are still endless opportunities for exploring this unique environment.

If you have never been to Cape Cod, you may want to take advantage of guided tours offered by the National Seashore from mid-June through Labor Day. Evening programs at the Visitor Centers cover such topics as shipwrecks, Pilgrims, dune life, and fishing.

The National Seashore has many miles of hiking and bicycle trails. Some are self-guiding, while others are covered on scheduled walks given by Park Rangers. Visitor Centers and trails are located at Eastham, South Wellfleet, Truro, and Provincetown. Beaches for public use are marked along Route 6.

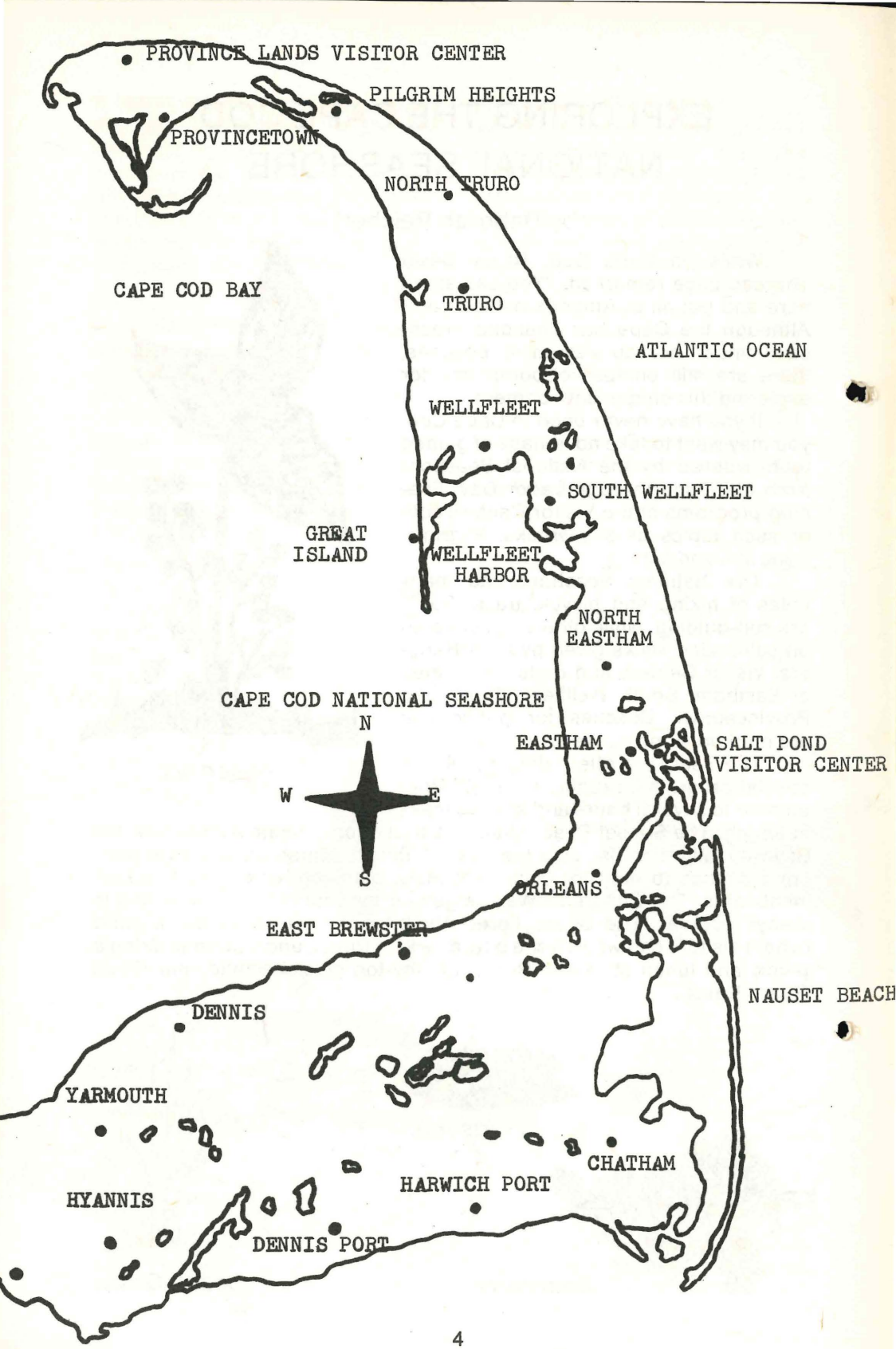
Poison Ivy

The Seashore offers daily as well as special programs, ranging in length from an hour to several hours and several miles in length. The Sunset Beach Walk is timed to coordinate sunset over the Bay with full moon rise over the Atlantic Ocean. Marsh walks give explorers a chance to hunt for clams, mussels, plankton, and other brackish inhabitants. The Children's Walk is geared for younger explorers, and is always popular. The Beech Forest Walk leads through dunes, a pond (where visitors can walk over a boardwalk), a forest, and a swamp. Bring a picnic and lunch at Doane Rock, a many-ton glacial erratic near Coast Guard Beach.

Hudsonia

Bearberry

Beach Grass


PROVINCE LANDS VISITOR CENTER
PILGRIM HEIGHTS
PROVINCETOWN
NORTH TRURO
CAPE COD BAY
TRURO
ATLANTIC OCEAN
WELLFLEET
SOUTH WELLFLEET
GREAT ISLAND
WELLFLEET HARBOR
NORTH EASTHAM
CAPE COD NATIONAL SEASHORE
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EASTHAM
SALT POND VISITOR CENTER
ORLEANS
EAST BREWSTER
NAUSET BEACH
DENNIS
YARMOUTH
CHATHAM
HARWICH PORT
HYANNIS
DENNIS PORT

If you are a dune buggie enthusiast, you may want to get a permit to use the dune buggie trails in Provincetown. Self-contained campers are permitted to use the beach by permit obtainable at the Province Lands Visitor Center on Race Point Road.

Autumn is a wonderful time to visit Cape Cod, as most of the tourists have returned to work and school, the highways are once again uncrowded, and beach heather and sea lavender add brilliant splashes of color to the landscape. Ducks and geese are abundant, the air is crisp, and northeast storms help provide good beachcombing.

You might want to read Henry Beston's *Outermost House* before your trip to Cape Cod, and compare the author's impressions with your own. Thoreau's *Cape Cod* is a classic, and full of interesting anecdotes. Be sure to bring your field guides and binoculars. The Visitor Centers are stocked with books, pamphlets, and maps to help make your visit more enjoyable.

If you decide to do your Cape Cod exploring in the summer, you will see and hear more if you venture off the trails and away from the noisy beaches. Private property must be respected, but there are miles of dunes and sandy shores where one can find solitude and an awareness of man's historic struggle for survival on this tiny stretch of land.

Deborah Reichert worked at the Cape Cod National Seashore as a Ranger-Naturalist during 1969 and 1970. Studies on the Quahog and the ecology of the Provincelands have brought her back many times to this "fragile outpost."

Vegetation of the Sandy Coast

by C. John Burk

The observant visitor to the sandy seashore, whether on Cape Cod beaches, North Carolina barrier bars and islands, or any other sufficiently undisturbed area on the Atlantic coast of North America from Plum Island, Massachusetts, south to Florida, is soon impressed by the arrangement of the vegetation, a pattern established chiefly through the action of tides and wind-borne salt spray, particles of salty ocean water picked up by on-shore breezes and blown inland.

None of the so-called "higher" plants, those species with true roots, stems and leaves, can withstand the rigorous conditions of the outer beach. On the first dunes, however, beyond the effects of continous wave action but within a zone of heavy spray, the first vegetation appears, occasionally a strand of sea rocket, a member of the mustard family with waxy, thickened leaves. The most important plants on these dunes are various kinds of grasses. Beach grass, *Ammophila breviligulata,* is widely planted in dune stabilization projects and abundant as a native south to the Outer Banks of North Carolina where sea oats, *Uniola paniculata,* replaces it as dominant on shifting sands. The seaside goldenrod occurs from Canada south to Florida, flowering by late summer on northern dunes where killing frosts come early, and till December in the lower portions of its range. Beach heather, a low shrub with wooly leaves, is found from the Gaspe Peninsula south to Kitty Hawk, North Carolina, while from Virginia to Florida, another shrub, marsh elder, is common in these sites.

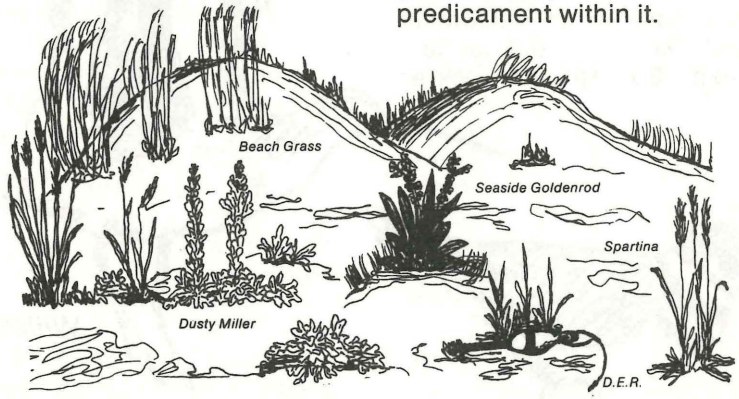
Behind the zones where grasses predominate, the effects of salt spray are less evident. Shrubs become more common, bayberry *(Myrica pensylvanica)* south again to the North Carolina Outer Banks, its relative the wax-myrtle *(Myrica cerifera)* from New Jersey to Florida, both species providing important cover and food sources for birds which migrate following the shore. Cedars occur in the shrub zone all along the coast, while on many northern beaches, particularly those with sands of glacial origin, the shrub oak, *Quercus ilicifolia,* forms dense stands. On the southern barrier bars and islands, shrub oaks are replaced by bushy live oak *(Quercus virginiana).* Both these oaks tolerate salt spray better than other members of their clan and yet, because of an intolerance to shade, are excluded from the coastal woodlands which occur where high dunes provide sufficient protection for trees to develop.

In many ways, pockets of forest behind the dunes are the most interesting vegetated areas along the coast: the Provincelands area in the Cape Cod National Seashore with beech and black oak, sour gum and pitch pine on ridges flanking ponds of goldenclub and other unusual aquatics; the pigmy holly forest on Fire Island; Buxton Woods behind Cape Hatteras with strips of laurel oak and loblolly pine separating saw-grass marshes teeming with water moccasins. Where these forests are not within protected areas, as behind the dunes at Jockey Ridge or on the southern tip of Bogue Banks in North Carolina, they are threatened by developers and some

stands have been, unfortunately, already ruined. Coastal woodlands thrive in a most unusual environment, one in which temperatures are moderated by the presence of the oceans, where rainfall is generally abundant, and yet where adjacent areas are too rigorous for forest vegetation to occur. They thus provide refuges for southerly plants which, during warmer periods, ranged farther northward—holly, persimmon, and goldenclub on Cape Cod, Spanish moss and live oak in Kitty Hawk woods, stemless palmetto, our northernmost palm, at Buxton —and are invaluable clues for understanding conditions of the past.

On the sound sides of barrier islands, near inlets and at the edges of salt ponds, saltmarshes occur, thriving in high salinities and constant tidal fluctuations. As a resource, these marshes are invaluable; energy fixed by the photosynthetic activities of marsh plants is passed on to innumerable organisms of coastal waters and provides the base for many marine food chains, while the marshes themselves are spawning grounds for countless organisms. All along the coast, saltwater cordgrass, *Spartina alterniflora,* is the pioneer at the water's edge, invading mudflats, lining mosquite ditches, thriving in water of the highest salinities. Further back salt-meadow grass, *Spartina patens,* occurs, a species used for pasturage since colonial times. Saltmarsh plants show a wide variety of adaptations allowing them to survive the marsh environment: the fat succulent stems of the saltworts *(Salicornia),* the inrolled leaves of salt-meadow grass, the waxy or leathery leaves of a variety of types.

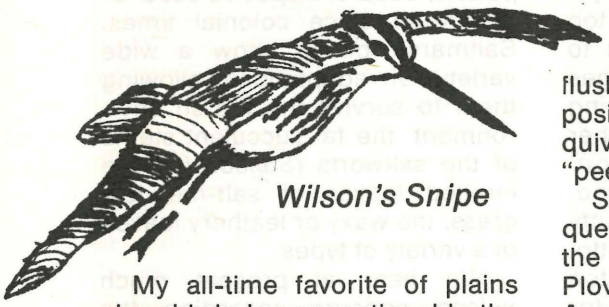
We hear at present much voiced concern regarding the human environment, the dangers of pollution and the values of open space. At the land-edge, where terrestrial life meets limits to its tolerance, one becomes increasingly aware of the tenuously held conditions which allow life on earth to persist, of the complex factors which interact to govern the distribution of all living forms. A walk through the zones of vegetation which exist in balance with the tides and blasts of saltspray becomes more than a botanical experience; it lends insight as well into the dynamics of the global ecosystem and our own predicament within it.



Dr. Burk is a Professor of Biology at Smith College, Northampton, Massachusetts. Dr. Burk has written articles on Cape Cod and the Outer Banks of North Carolina, and is a frequent contributor to the publications of the Massachusetts Audubon Society.

SHOREBIRDS OF THE SHORTGRASS PLAINS

by Vaughn M. Rundquist

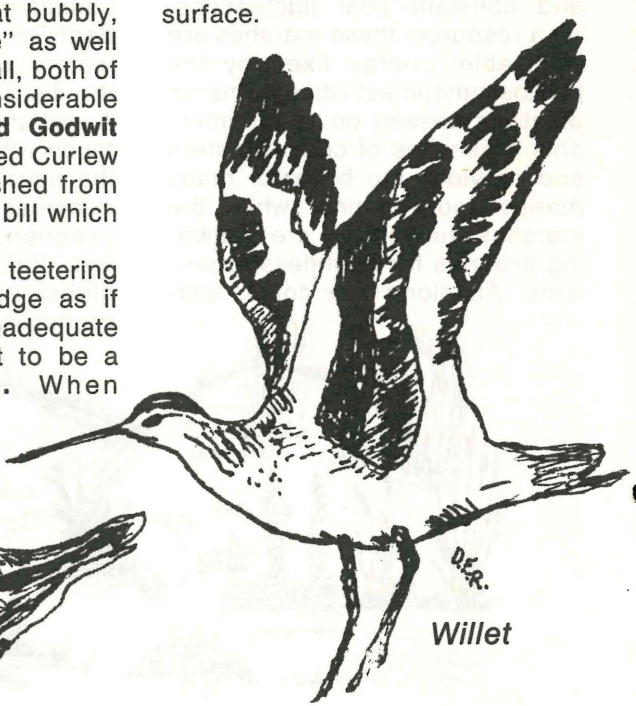


Wilson's Snipe

My all-time favorite of plains shorebirds is unquestionably the **Long-Billed Curlew,** a choice based as much on its unforgettable voice as on its stately bearing and eight-inch scimitar bill. In mid-April, sometimes days before actually seeing the Curlew, one hears its somewhat bubbly, drawn-out "wolf whistle" as well as a coarse, vibrating call, both of which carry for considerable distances. The **Marbled Godwit** resembles the Long-Billed Curlew in size, but is distinguished from it by a slightly upturned bill which is orange at the base.

A tiny shorebird seen teetering nervously at water's edge as if trying to balance on inadequate legs will likely turn out to be a **Spotted Sandpiper.** When flushed, it whisks away to the opposite side of the pond on stiff, quivering wings, uttering a bright "peet-weet" as it goes.

Shorebirds observed less frequently during the summer are the American Avocet, Upland Plover, and Common Snipe. The **Avocet,** a typically western species strikingly marked with black and white and having slender blue legs, is to be found around waters that are strongly alkaline. Its upturned bill is handy for ladling invertebrates from the water's surface.



Willet

Killdeer

Upland Plovers were seen only five times during three years of field work, and no more than two were seen on any one occasion. This gangly bird with a head resembling that of a pigeon may be considered the trademark of the American grasslands, but is nowhere very common. Artists often depict the Upland Plover in a typical pose atop a weatherworn fence post with wings stretched high overhead for a moment after alighting.

Of the summer residents, the **Common Snipe** was seen least often during the study. As a boy growing up in Minnesota, I heard for a number of years the rising inflection of the Snipe's haunting call without being able to discover the owner of the voice. When a Snipe is flushed, it is sometimes mistaken for an American Woodcock of eastern United States. The Woodcock, however, has cross stripes on its head, in contrast to the longitudinal stripes of the Common Snipe.

Shorebirds breeding on my study areas demonstrated a dramatic habitat preference. The investigation was conducted in areas having a vegetative cover of grass as well as in areas with a predominantly sagebrush cover. Among those species observed often enough to establish a trend, the choice of cover type was invariably grassland.

I found nests of the Killdeer, Wilson's Phalarope, American Avocet, and Willet, but these were discovered more often by accident than by plan, for a shorebird's nest is exceedingly well camouflaged. The nests were similar in having four speckled or blotched eggs with the smaller ends pointing inward. I have seen the downy young of these four species as well as of the Long-Billed Curlew and Marbled Godwit, and am convinced that shorebirds are among the most protective parents of the avian world. At the approach of an observer, adults with young never fail to become fully occupied with leading or driving the intruder away from the scene with vehement protests. Meanwhile, the young continue busily feeding as though unaware of any potential danger. I have seen Long-Billed Curlews, for example, hanging almost motionless in a stiff breeze while informing me in no uncertain terms that I have overstepped the bounds of their territory and invaded the privacy of a grasslands nursery. And I remember the occasion on which an excited Marbled Godwit parent stooped on me in the manner of a hawk.

About the time the summer residents are arriving on the study areas, one may expect to see a few additional species making refueling stops on their flights to nesting grounds in Canada and the Arctic. **Lesser Yellowlegs** are rather commonly observed feeding on mud bars and shorelines in late April and early May as well as on the return trip in late summer. The **Greater Yellowlegs** of the same genus is seen in similar areas during the same periods, but is less commonly observed. **Least Sandpipers** were not noted until late summer. No larger than a sparrow, this smallest of North American shorebirds is apt to be identified only as a "peep" by most beginning birders (and often by more experienced ones!).

A special delight is provided by the precision flying demonstrated by flocks of **Long-Billed Dowitchers** as they move together in a low, zigzag course over a shallow pothole or sheet water. On one occasion I counted well over 100 individuals in one such flock. Dowitchers feed with a character-

istic up-and-down movement of the beak, and a feeding flock reminds one of an army of sewing machines.

Black-Bellied Plovers were seen but once, and this proved to be a rare occurrence in another sense. Two individuals were observed together in late May; one was in typical breeding plumage, while the other wore the dress of a fall bird advanced in molt.

As long-legged babies mature, the curtain descends once more on the summertime shorebird extravaganza, and one suddenly realizes that the call of the Curlew is no longer heard in the land. Many of the shorebirds nesting in north-central Montana depart for wintering areas during August. The following spring, one eagerly looks forward to the first returning Killdeer, an event marking the beginning of another chapter in the shorebird saga of the plains.

With no trees to conceal them, birds are one of the most obvious features of the shortgrass plains. Included among the more spectacular of the avian denizens are the shorebirds. While involved in a field waterfowl study in Phillips County, Montana, I kept records of 14 species of shorebirds, 9 of which are potential breeders on the study areas, and 5 of which nest in regions to the north.

The most common of study-area breeders is the well-known **Killdeer,** frequenter of a variety of habitats from gravelly shores to golf courses. Its familiar "killdeer!" can be heard as early as the latter part of March, and a few individuals can still be seen well into October. The **Willet,** arriving some weeks later, also remains on the study areas throughout the summer. This bird appears very nondescript while feeding, but the prominent wing stripe obvious during flight at once identifies it.

A shorebird seen swimming on potholes and stockmen's reservoirs is almost certain to be the **Wilson's Phalarope,** the only species of phalarope nesting in central North America. This comical little bird can be seen spinning around in the water, jabbing at insects with its needle-like bill. Male phalaropes, contrary to the usual situation among birds, are less brightly colored than the females, and it is the male which assumes housekeeping chores at the nest.

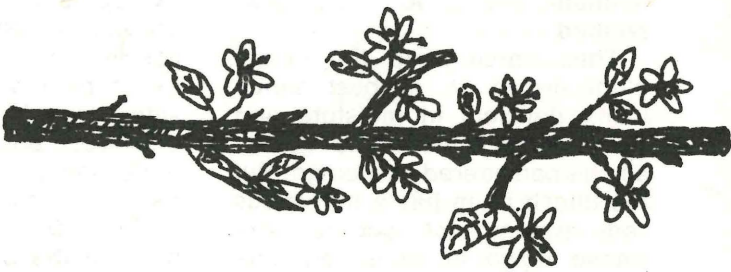
Yellowlegs

Vaughn Rundquist is working for his PhD. at Montana State University. He has spent the past three years studying birds and their habitats in Montana. Mr. Rundquist has written several papers on the wild turkey, in addition to his work on waterfowl and shorebirds.

THE BEACH PLUM

by

Peggy Thomson



DER.

Reprinted by permission from Man and Nature, *March 1973.*

In May white clouds seem to float low over the dunes as the thickets bloom. In summer those thickets leaf out, their brittle branches hung with little globes, glass-green and firm, no bigger than cherries. It's mid-August and September when the fruit is ripe. And then on sparkling, still mornings the Cape Codders are out, filling their pails with the many-colored treasure of *Prunus maritima,* or the wild beach plum.

Mauve, rosy, amber, red, purple, some shiny, some heavily frosted with bloom, some round, some oval, some smooth, some sutured like the domestic plum—the treasure, like wild things generally, is an odd lot. In truth, it's an astringent little fruit, tart to the taste, almost more pit than pulp, scorned by the birds, dropped by its native promoters as a commercial flop.

"Plumming" is a pleasure enhanced, New England style, by the prospect of creating something rather special in the form of ruby-colored jellies and jams out of nuggety bits of nothing. And hazarding calamity to do it. For it seems a rule that the best stands of beach plum are found

entwined with poison ivy, thriving itself, in vibrantly luxurious stands.

The fruit of *Prunus maritima,* according to pomologists' manuals, is characterized by a skin that is thick, tough and acrid, a cherry-like stone pointed at both ends, ridged on one edge, grooved on the other, and flesh that is crisp and juicy, with a flavor ranging from inedible to almost as rich as the best domestic plums. Its size is half to three quarters of an inch in diameter. The blooming period is late for a plum—two weeks after the shad bush—and profuse, with blossoms thick along the full extent of the spikey branches; it lasts for two weeks, at which time the leaves appear—sharply pointed, round to oval, saw-toothed.

The coarse sand the beach plum grows in, at best sandy loam, deficient in moisture and mineral nutrients, would generally be considered wasteland. But the beach plum has a marvelous root system that diggers have traced down to eight, ten, and twelve feet, and, once established, it is virtually indestructible. Inland, in protected situations, it grows tree-like and tall, as high as ten feet.

The bushes develop on such an individualistic timetable as to be out of phase with their neighbors for spraying purposes or for picking. Picking requires repeated trips not just to each patch but to each bush within the patch, a single one of which may be hung like a Christmas tree with little globes that are green, yellow, pink, reddish and a blueberry blue—all essentially blue beach plums but at different stages of ripeness.

No one now expects this quirky fruit to provide "gold in them thar dunes"—at best, a cottage industry, but one with a very special product supplying jewel-like jellies to roadside stands. And the beach plum will continue to provide a treat for the dune wanderers who enjoy plumming out under fair skies as a pleasurable pastime akin to gathering mussels in the shallow estuaries and digging for the Cape's famous quahog clams.

THE GREAT BLUE HERON
Ardea herodias herodias

by Mildred L. Rulison

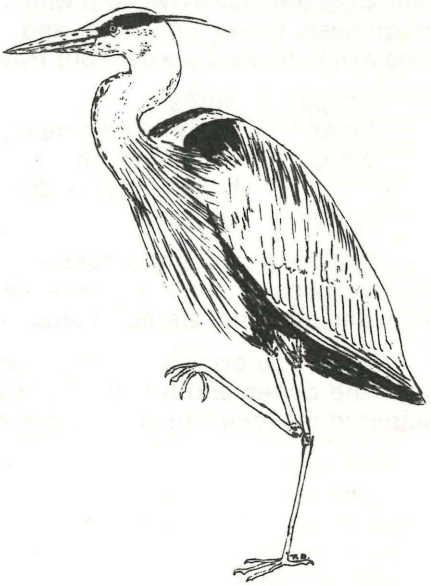
During August the Great Blue Heron or "crane" of the country boy may be seen on its solitary flight for food. The duties of parenthood are over for the season and this great bird likes to find a secluded cove in the shallow waters of a lake or river. Here in the early morning or evening he may be seen standing motionless as a statue, until a frog or fish approaches. Then his sword-like bill strikes and in a second the fish or frog has been caught. Very often he poses on one foot or stalks slowly through the shallow water in search of a salamander or crayfish.

I have seen this large bird during the winter along the Tamiami Trail in Florida, where fishing in the Everglades insures him a plentiful supply of food during the winter. I remember the joyous sight of twelve herons fishing in the Canadian waters of the Gaspe Peninsula a few summers ago. However, it is not necessary to travel great distances to see this largest of our truly American herons, because it is a regular transient in this region. He breeds north of us and winters south of us.

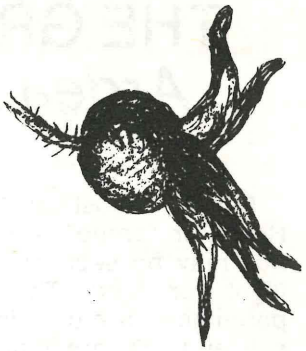
This region has offered many "memory pictures" of the Great Blue Heron. I saw one fly over U.S. Highway 1 during the five o'clock traffic rush. The heron made a lovely silhouette against the evening sunset. It flew with its neck drawn in and its legs extended far behind, while its huge wings carried it safely over and away from the ribbons of cars on the super highway.

We are fortunate to be able to see this stately, dignified and interesting bird, and to hear its hoarse cry of "crank crank" as it takes to its wings when startled, but can you imagine the thrill of finding a rookery or breeding place where a hundred or more nests may be seen in one colony?

When a sharp-eyed country lad points out a "crane" to you, look for the blue gray coloration, with a white head and neck, black flowing plumes, and then you will know that you have seen the largest wading bird that may be found in the Northern States.



Mildred Little Rulison is a Freelance Naturalist who currently resides in Rayway, New Jersey. She has taught and lectured in Illinois, Indiana, New York, and New Jersey. Mrs. Rulison is the author of Nature Diary Through The Year *(New York: Vantage Press, 1971), in which the story of the Great Blue Heron appears.*



SALT SPRAY ROSE HIP JAM

by Shelley White

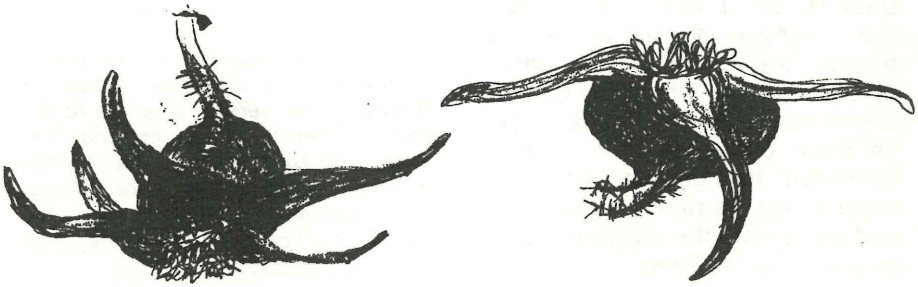
Throughout late summer the rope hips, or fruit of *Rosa rugosa,* a thorny, shrubby dune plant, are bright scarlet, smooth, and cherry-sized. They make a fine jelly!

Gather a good bucket-full, remove the stem and blossom ends and chill. Split the hips in two and with a small spoon scoop out the seeds and tough flesh. Cover with water and simmer until soft. Run them through a food mill to make a purée. Your Rose Hip Jam recipe will be:

4 cups	purée
1 cup	finely diced pineapple
½ cup	water and 1 finely sliced lemon boiled together for 15 minutes
5 cups	sugar

Boil the purée and pineapple, drain the lemon and add it along with the five cups of sugar to the simmering purée. Cook slowly until quite thick and pour into sterilized jars. Seal with paraffin while still hot.

When you open a jar of jam on a gray winter day, you will smell and taste the dunes and feel the hot sand under your feet just as when you gathered the rose hips on that late August day.



FIELD NOTES MAY-JUNE 1973

The bird migration was extremely slow this Spring. The wet cool weather was probably the limiting factor for the spotty number of birds that moved through this area.

NEW LONDON, WATERFORD: The **BANK SWALLOWS** returned to Waterford on May 4. Three **BROAD-WINGED HAWKS** were seen in the Bolleswood area of the Arboretum May 5. A **WHIP-POOR-WILL** was found in the parking lot of Chuck's Steak House, New London May 5. A male **EVENING GROSBEAK** was found in Waterford May 7, and a female **EVENING GROSBEAK** was seen in Quaker Hill May 8. The overall wintering population of 'BEAKS' was lower than last year. A pair of **COMMON TERNS** returned to Pleasure Beach for the third year on the same date—May 8. *Five* **OSPREYS** were sighted over Jordan's Cove and Gadener's Woods area May 20. Two **TRAILL's FLYCATCHERS** were observed in Waterford June 1. Other Waterford sightings include: a **GLOSSY IBIS** feeding in a pothole near Boston Post Road and the Crossroads May 30; two **PIPING PLOVERS** June 4; a **ROSEATE TERN** June 10; and a **COMMON LOON** June 11. A **HOODED WARBLER** set up its nesting territory in back of TSC. A **BLUE-GRAY GNATCATCHER** constructed a nest of lichens on a dead limb overhanging the Arboretum Pond, unfortunately the nest was later abandoned.

NIANTIC, OLD SAYBROOK: A **RED-BELLIED WOODPECKER** was observed on May 4 in Niantic. Two **CATBIRDS** were also sighted there on the same day feeding at a suet feeder. An uncommon **WHITE-THROATED SPARROW** was seen on May 11 and 12, also in Niantic. Several **WHITE-THROATED SPARROWS** could be heard singing until May 15. The birds also left about that time last year. A rare **LAWRENCES'S WARBLER** was seen in the Otter Cove area, Old Saybrook May 7. LAWRENCES'S WARBLER is a hybrid cross between the GOLDEN-WINGED and BLUE-WINGED WARBLERS.

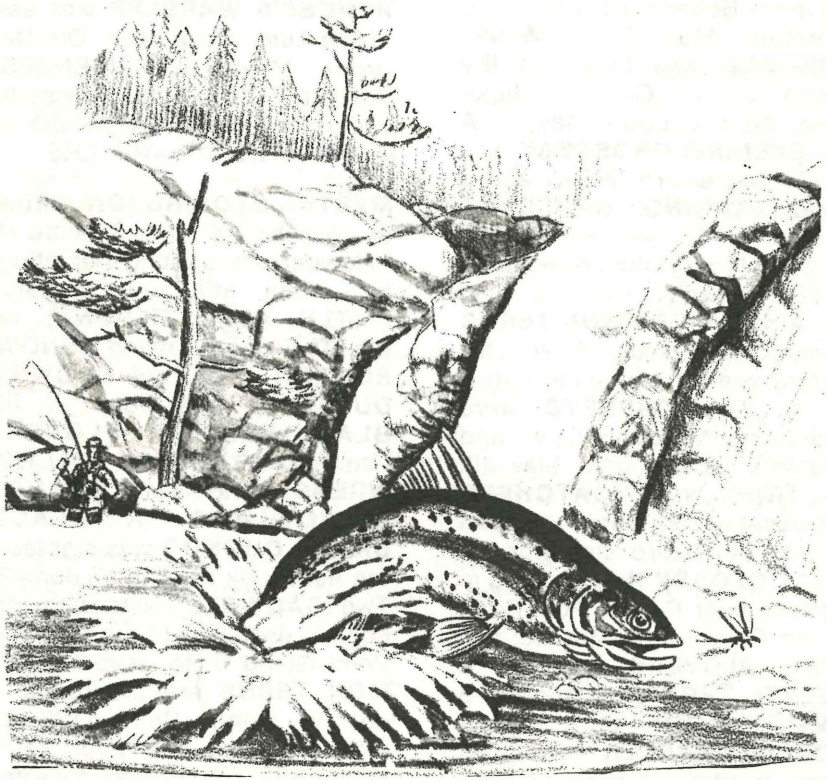
MYSTIC, STONINGTON: Birders at Barn Island June 3 made the following interesting sightings: five adult and one immature **LITTLE BLUE HERONS;** two **CATTLE** and seven **SNOWY EGRETS;** a pair of **GADWALL DUCKS;** a late flock of fifty **BLACK-BELLIED PLOVERS;** two **LONG-BILLED MARSH WRENS;** and two **GREATER YELLOWLEGS.** A **BLACK-BILLED CUCKOO** was sighted in the Assekonk Swamp on June 24. Two **GADWALL** nests with nine eggs in each was found on Sandy Point Island. Also, several **COMMON TERNS** are attempting to nest on Sandy Point. One nest with one egg has been found along with six scrapes for other nests.

Several reports have come in about **STARLINGS** eating **GYPSY MOTH** caterpillars. Because of the long caterpillar hairs, the STARLINGS usually beat the caterpillars on the ground several times before swallowing them.

The following is a note on nesting box predation: **BLUEBIRD** houses, 4 set out—4 destroyed including five young and ten eggs; **TREE SWALLOW** boxes, 8 set out—8 destroyed including four young and twenty-one eggs. Raccoon tracks were found in the mud near each of the nesting boxes.

Over 200 **HERRING GULLS** have been tagged with orange or blue tags, if you see a wing tagged Gull, please record the time of day, color of tag, letter-number of the tag, location of sighting and either call or write Thames Science Center. The purpose of the tagging system is to trace the local patterns of movement of the Herring Gulls.

CONTRIBUTORS: *Mrs. J. Merrill, B. Ryan, J. Russell, Mrs. P. Dewire, E. Whitten, Dr. R. Parker, W. Delpriore, G. Bissel, F. Haeni, Mrs. J. Lombardino, Mrs. C. Chappin, T. DeGange.*



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NOTES FROM HERE AND THERE

A communications editor at the University of Georgia has charged that **"admen are overusing 'ecology' campaigns."** Nancy J. Bunker, writing in *Advertising Age,* observed that ecology is being used to sell everything from cosmetics (Elizabeth Arden and Andrea) to cough syrup (Hudson) to community airports (General Aviation Manufacturers Association). Ms. Bunker stated that "Ecology as a scientific discipline can run the risk of losing its scientific validity and virtue in the eyes of the public" because ecopornography contributes to the public's confusion over one of the most pressing issues of this decade—"the rape of the environment."

Impact Films (144 Bleecker St., New York, NY 10012) has released a new film, **"How Safe Are America's Atomic Reactors?".** It was produced by Granada Television, London, to alert the British public to the dangers of the atom-fueled power plants. The 26-minute, 16 mm film, has been endorsed by the Union of Concerned Scientists. Write to Impact Films for rental rates.

More than $1 billion, calculates the National Center for Resource Recovery, is the value of the recoverable materials plus the energy available from heat from the burnable materials contained in the 115 million tons of trash and garbage that Americans are throwing away every year.

Except for man, **the common housefly is apparently the most far-ranging species,** being found almost everywhere except the polar regions. Originally the unpopular insect was confined to tropical latitudes, but it has been able to extend its range through two adaptations: it can spend the cooler seasons of the year in a dormant state, and it has adopted man's heated structures as its home. The common cockroach, body louse, pharoah ant, house mouse and other species have similarly invaded a diversity of environments. They share homes with man and, presumably, will dwindle or disappear if *Homo sapiens* disappears.

Construction plans for **America's longest bikeway** have been drawn up by the California Department of Water Resources. The 444 mile route will follow a north-south path along a newly-constructed aqueduct system, and will run from the Sacramento Delta to Southern California.

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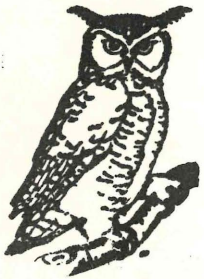

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